SOME NEW AMERICAN BEES.

BY T. D. A. COCKERELL, BOULDER, COLORADO.

Dioxys pomonæ, n. sp.

♂.—Length hardly 7 mm.; black, the thick flagellum dull reddish beneath, eyes sage-green, tegulæ entirely piceous, wings strongly dusky; subapical lateral spines of the abdomen sharp and conspicuous. By its small size and general appearance this suggests *D. Rohweri* Ckll., compared with which it is more robust, with the head and thorax broader and less hairy, the tegulæ without red (largely red in *Rohweri*), the wings considerably darker, the abdomen much more coarsely punctured, and with acute subapical spines. Compared with *D. Martii* Ckll., it is smaller, with narrower abdominal bands and dark tegulæ. The tarsi are somewhat reddish, but not so red as in *Martii*; the spurs in both are red. The first r. n. joins the second s. m. some distance from its base. In spite of the greater superficial resemblance to *D. Rohweri*, the insect is most nearly related to *D. Martii*.

Hab.—Claremont, California. (*C. F. Baker*, 7221.)

HOPLITELLA, gen. nov.

A genus of small bees related to *Osmia*, *Hoplitis*, etc.; colours red and black, not metallic; wings dusky; stigma rather small, its part on marginal cell less than first s. m. on marginal; marginal rather obtusely pointed, away from costa; b. n. meeting t. m.; first r. n. joining second s. m. very close to base, and second r. n. about twice as far from apex; basal middle of first abdominal segment smooth and shining, not separated by a keel or ridge; maxillary palpi 5-jointed, the joints measuring in μ: (1) 70, (2) 102, (3) 120, (4) 85, (5) 50; the third is more slender than the second; labial palpi with the joints measuring: (1) 680, (2) 1260, (3) 70, (4) 153; the second is about 153 broad at apex; the third very short and stout, almost heart-shaped; the last slender basally, broadening apically; tongue reaching about to level of last joint of labial palpus; blade of maxilla very long and slender. Male with head and thorax finely punctured; labrum of the usual form, but only moderately long, its apical margin gently convex, the corners rather rounded; mandibles strongly bidentate; antennæ simple, flagellum slender; cheeks moderate, occipital region of head not enlarged; sixth abdominal segment with a strong red tooth at each side, and its reddish hind margin slightly reflexed and shallowly emarginate in the middle; seventh segment broadly truncate, the truncation deeply notched in the middle; no ventral teeth.

Hoplitella pentamera, n. sp.

♂.—Length about 7½ mm.; head, thorax and legs black; abdomen with the first three segments bright ferruginous-red, the second and third with a blackish stain in the middle; sides of fourth red, the others black; ventral segments with more or less evident white hind margins; face densely covered with long silky white hair, stained with yellowish about the middle; eyes sage-green; flagellum slender, entirely black; mandibles black; ocelli large; thorax with rather long dullish white hair; area of metathorax smooth and shining; tegulæ bright apricot colour; abdomen finely punctured, with poorly-developed white hair-bands; spurs creamy-white.

Hab.—Claremont, California. (*C. F. Baker*, 7224.)

Hoplitella shows many points of resemblance to *Proteriades* Titus (*P. semirubra* Ckll.), but is at once distinguished by the 5-jointed maxillary palpi, and the form of the labial palpi, and more superficially by the dusky wings.

Compared with *Chelostoma (Cephalapis) jacintanum* Ckll., it is easily known by the ordinary-sized head, bidentate mandibles, more slender marginal cell, merely emarginate seventh segment, etc.

Compared with *Osmia andrenoides* Spinola, from Algeciras (*Morice*), it is superficially very similar, though smaller; but *andrenoides* has a much longer tongue, the venation is different in several ways (thus, the first r. n. enters second s. m. a long way from base), the sixth abdominal segment has no lateral teeth, and the seventh is bidentate with a pair of triangular teeth.

Osmia semirubra Friese, from Jericho (*Morice*), also differs greatly in venation from *Hoplitella*. The b. n. in *semirubra* goes basad of the t. m., and the first r. n. enters the second s. m. far from its base.

Osmia remotula, n. sp.

♀.—Length about 6½ mm; broad, robust; head, thorax and legs black, with much white hair, becoming grayish dorsally, and pale yellow on inner side of tarsi; head broad, eyes sage green; antennæ short, entirely black; mandibles black; head and thorax minutely punctured; area of metathorax shining, dull and rugose at base; tegulæ shining piceous; wings dusky, nervures black; venation as in *O. andrenoides*; spurs creamy white; abdomen with the first three segments bright ferruginous-red, without bands, exactly as in *O. andrenoides*, except that they are more feebly sculptured; other segments black, with grayish-white

hair, which covers the apical one ; ventral scopa white, short. The female *O. andrenoides* compared is from Corfu *(Morice)*.

Hab.—Claremont, California. *(C. F. Baker*, 7226). A representative of the group of *O. andrenoides* (subgenus *Erythrosmia* Schmied.), not before known in America.

Osmia (Gnathosmia) Louisianæ, n. sp.

♀.—Length nearly 9 mm ; agrees with Cresson's description of *O. Georgica*, and Robertson's additional diagnosis, except that instead of being "black, tinged with blue," it has the head, thorax and abdomen shining blue-green. The colour and general superficial appearance are as in *O. physariæ* Ckll., but the wings are very brown, whereas in *physariæ* they are clear. The mandibular processes are very large, forming, as Cresson says of *Georgica*, an arch interrupted in the middle. Legs black, the hind femora faintly submetallic in front ; tegulæ rufo-piceous ; ventral scopa long, light orange-yellow. The anterior coxæ are sharply keeled on the outer edge.

Hab.—Mound, Louisiana, May 4, 1905. *(C. R. Jones*, 234.) *O. Georgica* Cresson, was based on a single female from Georgia. Since then Robertson has taken it in Illinois, and Professor Titus informs me that it occurs in North Carolina. It is possible that the present insect is only a variety or geographical race, but it seems more likely that the difference of colour indicates a distinct species.

A NEW ALEYRODES ON BEARBERRY

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Although the common bearberry *(Arctostaphylos uva-ursi)* is circumpolar in its distribution, the insects which affect it in America do not seem to occur in Europe. Examples occur among the Coccidæ *(Targionia Dearnessi* Ckll.) and Aphididæ *(Phyllaphis Coweni* Ckll.), and now I have to add a species of Aleyrodidæ, of which I found pupæ and an adult near the top of Flagstaff Mountain, Boulder, Colorado, March 20, 1910.

Aleyrodes ursorum, n. sp.

Pupa oval, pure black, 680 μ long, 518 broad ; a little white secretion around the base, but no distinct fringe, and no dorsal secretion ; the usual sutural cross lines present ; dorsal area bounded by a well-defined double margin, which, when the pupa is seen from above is 35 to 50 μ from the lateral outline ; margin strongly crenulate, the projections shaped as in *A. mori* (Proc. U. S. Nat. Mus., XXVII, pl. XXXII, fig. 39), but longer,